

Abstract Of The Disclosure

A method of forming complex three-dimensional microstructures wherein an external stimulus is applied to a first layer of a photosensitive material, thereby creating voids in the first layer, and any material present in those voids is removed. A sacrificial material is then provided within at least a portion of the voids. This sacrificial layer fills the voids, either in whole or in part, and enables a second layer of photosensitive material to be stacked upon the first, while still preserving the pattern formed in the first layer. Once the sacrificial layer has been applied, a second layer of photosensitive material may then be stacked onto the first. Successive layers of photosensitive material and sacrificial material may be added until a final, complex three-dimensional structure is created. The sacrificial material may then be removed with a solvent such as carbon dioxide.